

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph 0010 on page 3 with the following rewritten paragraph:

The arrestin bound to the GPCR targets the GPCR to clathrin-coated pits or other cellular machinery for endocytosis (i.e., internalization) by functioning as an adaptor protein, which links the GPCR to components of the endocytic machinery, such as adaptor protein-2 (AP-2) and clathrin. The internalized GPCRs are dephosphorylated and are recycled back to the cell surface, or are retained within the cell and degraded. The stability of the interaction of arrestin with the GPCR is one factor that dictates the rate of GPCR dephosphorylation, and recycling. The involvement of GPCR phosphorylation and dephosphorylation in the internalization process has been exemplified in U.S. Ser. No. 09/933,844, filed Nov. 5, 2001, now U.S. Patent No. 6,459,604, the disclosure of which is hereby incorporated by reference in its entirety.

Please replace paragraph 0016 on page 4 with the following rewritten paragraph:

Figure 2 is a list of certain Class A and Class B GPCRs (A1 adenosine receptor (SEQ ID NO:03), adrenergic, alpha-1B-, receptor (SEQ ID NO:04), adrenergic, alpha-2A (SEQ ID NO:05), alpha-2B-adrenergic receptor, (SEQ ID NO:06), alpha-2C-adrenergic receptor, (SEQ ID NO:07), beta-1-adrenergic receptor, (SEQ ID NO:08), beta-2-adrenergic receptor, (SEQ ID NO:09), dopamine receptor D1 (SEQ ID NO:10), D(2) dopamine receptor (SEQ ID NO:11), d3 dopamine receptor (SEQ ID NO:12), dopamine receptor D4 (SEQ ID NO:13), dopamine receptor D5 (SEQ ID NO:14), muscarinic acetylcholine receptor M1 (SEQ ID NO:15), muscarinic acetylcholine receptor M2 (SEQ ID NO:16), muscarinic acetylcholine receptor M3 (SEQ ID NO:17), muscarinic acetylcholine receptor M4 (SEQ ID NO:18), m5 muscarinic receptor (SEQ ID NO:19), 5-hydroxytryptamine (serotonin) receptor 1A (SEQ ID NO:20), 5-hydroxytryptamine (serotonin) receptor 1B (SEQ ID NO:21), 5-hydroxytryptamine (serotonin) receptor 1E (SEQ ID NO:22), olfactory receptor 6A1 (SEQ ID NO:23), olfactory receptor 2C1 (SEQ ID NO:24), angiotensin receptor 1 (SEQ ID NO:25), angiotensin receptor 2 (SEQ ID NO:26), interleukin 8 receptor beta (SEQ ID NO:27), cx3c chemokine receptor 1 (SEQ ID NO:28), neurotensin receptor (SEQ ID NO:29), substance-p receptor (SEQ ID NO:30), vasopressin receptor type 2 (SEQ ID NO:31), thyrotropin-releasing hormone receptor (SEQ ID NO:32), oxytocin receptor (SEQ ID NO:33), neuromedin U receptor 1 (SEQ ID NO:34), gastrin receptor (SEQ ID NO:35), galanin

receptor 3 (SEQ ID NO:36), edg-1 (SEQ ID NO:37), central cannabinoid receptor (SEQ ID NO:38),
delta opioid receptor (SEQ ID NO:39), proteinase activated receptor 2 (SEQ ID NO:40), and
vasopressive intestinal peptide receptor (SEQ ID NO:41)).